

Television, which, unlike last year, are now among the top 15 services by prime time rating, are vertically integrated.<sup>433</sup>

## 2. *Access to Programming*

157. As part of the 1992 Cable Act, Congress sought to promote entry into local distribution markets through interim limits on strategic vertical restraints between vertically-integrated cable operators and programmers. This Congressional policy is embodied in Section 628 of the Communications Act and the Commission's program access rules.<sup>434</sup> These provisions place limitations on the conduct of vertically integrated firms distributing satellite programming and MVPDs, so as to foster competitive entry by competing distribution technologies. In general, the rules prohibit unfair methods of competition and limit discriminatory conduct, including the use of exclusive contracts.<sup>435</sup> In addition, under the program carriage provision of the Act,<sup>436</sup> competing distributors have standing to challenge exclusive arrangements that are the result of coercive activity.<sup>437</sup>

158. Although vertical relationships can often have pro-competitive effects, under certain market conditions, strategic vertical restraints (achieved by vertical integration, exclusive distribution contracts, or monopsony pressure) can also deter entry into the distribution market for delivered multichannel video programming. Accordingly, the Commission's program access policies balance the likely competitive harm to consumers created by a particular vertical arrangement against its likely efficiency benefits. By targeting those vertical restraints that can impede entry into the distribution market, the program access policy attempts to contribute to the long-term market performance of both the distribution market and the programming market.

159. We note that several parties have set forth general arguments both in favor of,<sup>438</sup> and critical of,<sup>439</sup> the program access regime. In general, we continue to believe that the program access rules, as enforced by the Commission, successfully promote competition from existing and potential competitors in the video programming distribution market, and do not

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<sup>433</sup> *Id.*

<sup>434</sup> 47 U.S.C. § 548; 47 C.F.R. §§ 76.1000-76.1003.

<sup>435</sup> Communications Act § 628, 47 U.S.C. § 548.

<sup>436</sup> Communications Act § 616(a)(2), 47 U.S.C. § 536(a)(2).

<sup>437</sup> 47 C.F.R. §§ 76.1300-76.1302.

<sup>438</sup> SCBA Reply Comments at 4-6; WCAI Comments at 16; DIRECTV Reply Comments at 3.

<sup>439</sup> Time Warner Comments at 19-27; TCI Reply Comments at 2-3.

unreasonably inhibit efficient integration or restrict the development and distribution of new programming.

*a. Commission Activities*

160. The Commission's enforcement of the program access provisions appears to be meeting one of the goals of the 1992 Cable Act -- ensuring access by competing MVPDs to satellite cable programming from vertically-integrated programming services.<sup>440</sup> Commenters generally agree that the program access rules have resulted in decisions that help emerging competitors to cable obtain access to programming,<sup>441</sup> although some commenters, including the National Rural Telecommunications Cooperative ("NRTC"), still allege that they do not have access to programming, or have access to it at discriminatory rates.<sup>442</sup>

161. *Enforcement Activities.* Of the four program access cases that have been resolved since the *1994 Report*, two involved petitions for exclusivity and two involved complaints by competing MVPDs. In an exclusivity petition decided in 1995, Cablevision Industries Corp., ("CVI"), a cable MSO, and USA Networks ("USA"), a cable programming vendor (the "Petitioners"), asked the Commission to authorize them to enforce an exclusive distribution agreement with the Sci-Fi Channel programming service ("Sci-Fi").<sup>443</sup> In denying the petition, the Cable Services Bureau concluded that limiting access to the Sci-Fi channel would impede the development of competition in local markets by denying a popular programming service to actual or potential competitors in seventy-eight communities nationwide.<sup>444</sup> The Bureau concluded that the exclusive contract was not in the public interest because the harmful effects of exclusivity on the development of competition in local distribution markets, and on competition from competing distributors, outweighed any efficiency-enhancing or pro-competitive effects of the requested exclusivity.<sup>445</sup>

162. In another exclusivity petition resolved in the last year, NewsChannel, a Division of Lenfest Programming Services, Inc. ("NewsChannel"), which is a regional and local news network that is 50% owned by TCI, asked the Commission to authorize it to enter

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<sup>440</sup> See *1994 Report*, 9 FCC Rcd at 7521-23 ¶¶ 157-60.

<sup>441</sup> See, e.g., NCTC Comments at 3.

<sup>442</sup> See, e.g., NRTC Comments at 6-8; Liberty Cable Comments at 4-5, 11-12.

<sup>443</sup> *Cablevision Indus. Corp. & Sci-Fi Channel (Petition for Public Interest Determination Relating to the Exclusive Dist. of the Sci-Fi Channel)*, Memorandum Opinion & Order, 10 FCC Rcd 9786 (1995) ("*SciFi Exclusivity Order*").

<sup>444</sup> *Id.* at 9790 ¶ 22.

<sup>445</sup> *Id.*

into exclusive program distribution agreements with its cable affiliates.<sup>446</sup> The Bureau found that NewsChannel had demonstrated that the limited exclusivity would not have a significant limiting effect on competition, and granted the petition based upon consideration of the public interest factors involved set forth in Section 628(c)(4)(A)-(E).<sup>447</sup>

163. One of the two discrimination cases resolved in 1995 involved a complaint by CellularVision against Prime SportsChannel Network alleging discrimination in the sale of satellite cable programming in violation of Section 628(c)(2)(B) of the Communications Act and Section 76.1002(b) of the Commission's rules.<sup>448</sup> CellularVision, the nation's sole LMDS licensee, which operates a single system in Brooklyn, New York, alleged that SportsChannel Associates, a programming vendor vertically integrated with Cablevision, refused to provide its SportsChannel New York programming to CellularVision. SportsChannel New York contended that it had not received satisfactory assurances from CellularVision concerning the way the latter would secure the programming services it distributes. The Bureau found SportsChannel's security concerns unpersuasive and held that SportsChannel's refusal to sell its programming to CellularVision constituted an unreasonable refusal to sell.<sup>449</sup>

164. In another discrimination complaint, NRTC filed a price discrimination complaint against EMI Communications Corporation, a fixed service satellite carrier that distributes the signals of satellite broadcast stations WWOR-TV and WSBK-TV to cable operators and HSD users through program packagers such as NRTC. The parties, assisted by Commission staff, settled the matter and the case has been dismissed.<sup>450</sup>

165. *Rulemaking Activities.* In November 1994, the Commission released an order on reconsideration addressing a number of program access issues that remained after the

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<sup>446</sup> *NewsChannel, a Div. of Lenfest Programming Servs. (Petition for Public Interest Determination Under 47 C.F.R. § 76.1002(c)(4) Relating to Exclusive Dist. of NewsChannel)*, Memorandum Opinion & Order, 10 FCC Rcd 691 (1994) ("*Newschannel Exclusivity Order*").

<sup>447</sup> 47 U.S.C. §§ 548(c)(4)(A)-(E); *Newschannel Exclusivity Order*, 10 FCC Rcd at 696 ¶ 36.

<sup>448</sup> *CellularVision v. SportsChannel Assocs.*, File No. CSR-4478-P, 10 FCC Rcd 9273 ¶ 11 (1995).

<sup>449</sup> *Id.* On September 20, 1995, SportsChannel Associates filed a Request For Stay Pending Reconsideration and a Petition For Reconsideration. On October 6, 1995, the Cable Services Bureau released an order denying SportsChannel's Request for Stay. *CellularVision v. SportsChannel Assocs.*, Order, File No. CSR-4478-P, DA 95-2134 (Oct. 6, 1995).

<sup>450</sup> *National Rural Telecommunications Coop. v. EMI Communications Corp.*, 10 FCC Rcd 9785 (1995). A third price discrimination complaint is pending. See *American Programming Serv., Inc. v. United Video Satellite Group, Inc.*, File No. CSR-4299-P (filed July 28, 1994).

Commission's first report and order concerning program access issues ("*Program Access Report and Order*")<sup>451</sup> In that order on reconsideration,<sup>452</sup> the Commission generally affirmed its initial determinations that: (1) a showing of harm is not required for actions brought under Section 628(c); (2) differences in costs at the MVPD level cannot justify pricing differences by a satellite broadcast programming vendor in the sale or delivery of satellite cable programming or satellite broadcast programming among or between cable operators, or other MVPDs; (3) the Commission's rules apply to contracts that were in existence before the effective date of the rules; (4) a 5% attribution standard should be used to assess the existence of vertical integration; and (5) a remedy allowing recovery for injuries from violations of program access rules is not necessary at this time.<sup>453</sup>

166. In December 1994, the Commission released another order on reconsideration of the *Program Access Report and Order*, in which it denied a petition by NRTC to include exclusive contracts between DBS operators and vertically-integrated MVPDs within the *per se* prohibition of Section 628(c)(2)(C) and Section 76.1002(c) of the Commission's rules.<sup>454</sup> On the basis of the findings and the legislative history of the 1992 Cable Act, which was focused on concerns over exclusive arrangements of cable operators, as well as the language of the

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<sup>451</sup> *Implementation of Sections 12 & 19 of the 1992 Cable Act (Dev. of Competition & Diversity in Video Programming Dist. & Carriage)*, First Report & Order, MM Docket No. 92-265, 8 FCC Rcd 3359 (1993) ("*Program Access Report & Order*").

<sup>452</sup> *Implementation of Sections 12 & 19 of the 1992 Cable Act (Dev. of Competition & Diversity in Video Programming Dist. & Carriage)*, Memorandum Opinion & Order on Reconsideration of the First Report & Order, MM Docket No. 92-265, 10 FCC Rcd 1902 (1994).

<sup>453</sup> In its comments, NRTC argues that the program access rules should include recovery for damages, at least in the amount of demonstrated overpayments. NRTC Comments at 1. See also NRTC Reply Comments at 1-2. But see Time Warner Comments at 27 (stating that "the Commission was flatly wrong to conclude . . . that it can award damages in a program access dispute (even if the Commission has held, for the time being, that it will not do so)").

<sup>454</sup> *Implementation of Sections 12 & 19 of the 1992 Cable Act (Dev. of Competition & Diversity in Video Programming Dist. & Carriage)*, Memorandum Opinion and Order on Reconsideration of the First Report & Order, MM Docket No. 92-265, 10 FCC Rcd 3105 (1994) ("*Second Program Access Reconsideration Order*"). In its comments, NRTC asserts that the vertically-integrated cable industry "continues to stifle competition . . . by denying access to DBS programming and by discriminating in price against C-band satellite distributors," NRTC Comments at 12, and argues that "there will not be full competition in the market for . . . video programming until the Commission prohibits exclusive arrangements between vertically integrated programmers and non-cable operator distributors in areas unserved by cable." NRTC Reply Comments at 1.

provision, the Commission denied NRTC's petition.<sup>455</sup> The Commission, however, noted that in declining to broaden its rules, it did not preclude the petitioner or any other aggrieved party from seeking relief from such contracts through other provisions of the program access rules.<sup>456</sup>

167. *Issues of Concern to Commenters in 1995.* In the *NOI*, we invited comment on additional information we should consider with respect to vertical integration.<sup>457</sup> This year, parties focused their comments on three principal areas: (1) the extension of the program access rules to non-vertically integrated programmers;<sup>458</sup> (2) the extension of the program access rules to non-satellite delivered programming;<sup>459</sup> and (3) the application of the program access rules to customers of LEC VDT platforms and to programming services affiliated with LECs.<sup>460</sup> Parties' comments are summarized in Appendix I.

168. In general, commenters raise essentially the same arguments that were raised last year with respect to application of the program access regime to programming services of non-vertically integrated vendors and to non-satellite delivered programming services.<sup>461</sup> As

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<sup>455</sup> *Second Program Access Reconsideration Order*, 10 FCC Rcd at 3106 ¶ 6, 3121 ¶ 33, 3127 ¶ 42.

<sup>456</sup> *Id.* at 3126-27 ¶ 40.

<sup>457</sup> *NOI*, 10 FCC Rcd at 7821 ¶ 88.

<sup>458</sup> *See, e.g.*, Satellite Receivers, Ltd., ("SRL") Comments at 1-2, 5; WCAI Comments at 17-18; WCAI Reply Comments at 3-6; PrimeTime 24 Comments at 5-6; NCTA Comments at 33-36, 38; NCTA Reply Comments at 11-12; National Cable Television Cooperative, Inc. ("NCTC") Comments at 3-4; SCBA Reply Comments at 6-8; Lifetime Television ("Lifetime") Comments at 1, 6-8; Viacom Comments at 1-6; Viacom Reply Comments at 4-5, 7-12; ESPN Comments at 1-8; ESPN Reply Comments at 5-8; Group W Satellite Communications ("GWSC") Comments at 2-5; CNBC, America's Talking and Canal de Noticias ("CNBC") Comments at 3-7; Lifetime Reply Comments at 2-3; HBO Comments at 23-24; HBO Reply Comments at 5-6.

<sup>459</sup> *See, e.g.*, Liberty Cable Comments at 11-12; Liberty Reply Comments at 9-11; WCAI Comments at 18-19; TWC Reply Comments at 14-18; NCTA Reply Comments at 12-13.

<sup>460</sup> *See, e.g.*, Liberty Cable Comments at 11-12; Bell Atlantic Comments at 14-16; GTE Reply Comments at 4-6; NYNEX Comments at 10-11; Viacom Comments at 5; Comcast Reply Comments at 6-13.

<sup>461</sup> *Compare 1994 Report*, 9 FCC Rcd 7530-34 ¶¶ 179-186 with *infra* Appendix I at 1-3. We note, however, that in support of its comments this year to extend the program access rules to non-vertically integrated programming providers, WCAI includes a 1995 article by

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we noted last year,<sup>462</sup> the Commission's program carriage rules provide standing to MVPDs to file complaints alleging that cable operators have coerced programmers, whether vertically integrated or not, into granting them exclusive distribution rights.<sup>463</sup> In addition, apart from the general assertion that non-vertically integrated programmers charge non-cable MVPDs higher rates than cable operators,<sup>464</sup> as was the case last year, commenters have not presented any specific evidence regarding anticompetitive behavior that would require further action by the Commission at this time.

169. Regarding commenters' claims about the applicability of the program access regime to VDT platforms, a number of commenters correctly point out that these issues are either already subject to Commission proceedings, or may be affected by pending legislation.<sup>465</sup> We also note that application of the Commission's program access rules to customer-programmers of VDT platforms is the subject of a pending program access complaint.<sup>466</sup> Therefore, we do not address these issues in this *Report*.

*b. Additional Competitive Issues Relating to Vertical Integration*

170. *Channel Occupancy and Program Carriage Comments.* In the *NOI*, we sought comments on the channel occupancy and program carriage rules. Time Warner argues that the Commission's channel occupancy and program carriage rules generally constrain the ability of cable operators to produce programming by diminishing economic incentives to do so.<sup>467</sup> Time Warner also submits that cable operators are less likely to risk scarce channel capacity on an unproven network if they cannot offer that network on an exclusive basis because of the program carriage rules.<sup>468</sup> Time Warner contends that cable operators are less

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<sup>461</sup>(...continued)

David Waterman, *Vertical Integration and Program Access in the Cable Television Industry*, 47 Fed. Comm. L.J. 511, 514-15 (1994), which concludes that the program access rules should apply to all program suppliers, whether or not they are vertically integrated.

<sup>462</sup> 1994 *Report*, 9 FCC Rcd 7531 ¶ 180.

<sup>463</sup> 47 C.F.R. §§ 76.1300-76.1302.

<sup>464</sup> See, e.g., WCAI Comments at 18; NCTC Comments at 6.

<sup>465</sup> See, e.g., Bell Atlantic Comments at 14-16; NYNEX Comments at 10-11; GTE Comments at 4-5.

<sup>466</sup> *CAI Wireless Systems Inc. & Connecticut Choice Television, Inc. v. Cablevision Sys. Inc.*, File No. CSR 4479-P (filed Feb. 28, 1995).

<sup>467</sup> Time Warner Comments at 25.

<sup>468</sup> *Id.*

likely to produce programming if they are not able to deliver it on their own systems because of the channel occupancy rules.<sup>469</sup> HBO submits that the channel occupancy rules are of little use in ensuring diversity in programming and "may in fact impede the use of technologies that will benefit consumers."<sup>470</sup> Pay-Per-View Network, Inc. d/b/a Viewer's Choice ("Viewer's Choice") agrees, arguing that the channel occupancy rules are contrary to the public interest because they limit cable subscribers' access to programming they would prefer to receive.<sup>471</sup> TCI sees little evidence that the channel occupancy limits are necessary to ensure access for non-vertically integrated programmers.<sup>472</sup>

171. The channel occupancy limits have been the subject of a reconsideration order. In April, the Commission denied petitions for reconsideration filed by the Center for Media Education/Consumer Federation of America ("CME") and Bell Atlantic. We declined: (1) to reduce the number of channels that a cable operator could devote to affiliated programming from 40% to 20% of activated channels;<sup>473</sup> (2) to reverse the decision to include over-the-air broadcast, public, educational and government, and leased access channels when calculating total channel capacity;<sup>474</sup> (3) to reverse the decision to exempt local and regional networks from channel occupancy limits;<sup>475</sup> (4) to reverse the decision not to apply channel occupancy limits beyond a system's first 75 channels;<sup>476</sup> and (5) to reverse the decision to grandfather all vertically integrated programming services being carried as of December 4, 1992, the effective date of the 1992 Cable Act.<sup>477</sup> In addition, the Commission declined to reconsider its decision to apply channel occupancy limits to cable systems that face actual head-to-head competition.<sup>478</sup> Bell Atlantic and Time Warner have appealed the channel occupancy decision

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<sup>469</sup> *Id.*

<sup>470</sup> Home Box Office Comments at 25; *see also* Time Warner Comments at 19-27.

<sup>471</sup> Pay-Per-View Network Comments at 5-6.

<sup>472</sup> TCI Reply Comments at 2.

<sup>473</sup> *Implementation of Section 11(c) of the Cable Television Consumer Protection & Competition Act of 1992 (Vertical Ownership Limits)*, Memorandum Opinion & Order on Reconsideration of the Second Report & Order, MM Docket No. 92-264, 10 FCC Rcd 7364, 7369 ¶ 14 (1995).

<sup>474</sup> *Id.* at 7372 ¶ 24.

<sup>475</sup> *Id.* at 7374 ¶ 30.

<sup>476</sup> *Id.* at 7375 ¶ 34.

<sup>477</sup> *Id.* at 7364-65 ¶ 2.

<sup>478</sup> *Id.* at 7376 ¶ 46.

to the United States Court of Appeals for the District of Columbia Circuit.<sup>479</sup> In general, we find little indication that cable channel occupancy limits have had a significant impact on the video marketplace during the last year.

172. *Leased Access.* Another means of addressing concerns relating to media diversity is found in the statutory leased access requirements.<sup>480</sup> One commenter, ValueVision International ("ValueVision"), believes that commercial leased access could address many of the problems of programmer access to cable systems. However, ValueVision claims "the 'implicit fee' provisions of the Commission's initial leased access rules . . . have been relied upon by larger cable operators to effectively eliminate leased access as the kind of tool Congress contemplated to promote such competition."<sup>481</sup> Petitions for reconsideration of these rules are under review.<sup>482</sup> Although the leased access rules provide a means of allowing editorial voices other than those selected by the system operator to be heard, a variety of difficult issues remain to be resolved.

### C. Technical Advances

173. Technological developments are likely to have particularly significant effects on competition in communications industries, where technologies, including those used in the distribution of video programming, are evolving rapidly. For example, the simultaneous transmission of two-way voice, video, and data has historically required a separate transport architecture for each type of information. Today, digital technology has evolved to the point where it appears that it may become economically feasible for voice, video, and data to be transported simultaneously over the same network. Digital technology has also paved the way for the development of compression technologies aimed at conserving bandwidth, which among other things, may permit MVPDs to expand offerings. Moreover, many different communications companies are in the midst of deploying new and improved system architectures to increase the bandwidth and efficiency of their distribution facilities. Such upgrades will allow for the introduction of new services that are currently unavailable to

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<sup>479</sup> *Bell Atlantic v. FCC*, Case No. 95-1335 (D.C. Cir. filed June 30, 1995); *Time Warner v. FCC*, Case No. 95-1337 (D.C. Cir. filed July 7, 1995). On August 22, 1995, the Court entered an order consolidating the cases and holding them in abeyance, pending resolution of certain attribution issues applicable to channel occupancy pending before the Commission.

<sup>480</sup> Communications Act § 612, 47 U.S.C. § 532.

<sup>481</sup> ValueVision Reply Comments at 2-3.

<sup>482</sup> *Implementation of Sections of the 1992 Cable Act (Rate Regulation, Leased Commercial Access)*, 8 FCC Rcd 5631 (1993), *recon. pending*, Dkt. No. 92-266. ValueVision urges the Commission to act on the pending reconsideration petitions (ValueVision Comments at 2), and has filed a petition for a writ of mandamus in the D.C. Circuit, *In re ValueVision Int., Inc., Petition for Writ of Mandamus*, No. 95-1564 (D.C. Cir. filed Nov. 6, 1995).



consumers.

174. Advances in digital technology and the deployment of advanced system architectures have the potential to exert a major influence on the structure of the market for the delivery of video programming, but the overall effect of these developments on future industry structure and competition with incumbent cable systems remains unclear. Whether these new technologies result in increased competition largely depends on how competing MVPDs are able to employ them to conserve bandwidth and to develop interactive services.

### **1. Background**

175. Because the delivery of full motion video requires a large amount of bandwidth relative to other types of communication, the limited supply of bandwidth has always been a barrier to the expansion of video services. For example, a telephone company can use as little as 3 kHz of spectrum to transmit a voice signal, whereas 2,000 times as much spectrum (a minimum of 6 MHz) has historically been needed to transmit a single broadcast channel of analog video.<sup>483</sup> Thus, networks transmitting analog video channels can reach their maximum capacity very quickly. The point at which MVPDs encounter this barrier, however, differs depending upon the distribution media and technologies they employ.

176. Cable systems' use of coaxial and fiber optic cable gives them the most bandwidth of all of the currently deployed MVPDs. The electrical characteristics of coaxial cable make it suitable for very high bandwidth transmission, up to one GHz of bandwidth.<sup>484</sup> Roughly 15% of total cable plant miles are in systems with 400 MHz to 1 GHz capacity, with offerings ranging from 52 channels to 150 channels.<sup>485</sup> Another 75% are in systems with capacities ranging from 330 MHz to 400 MHz, with offerings of between 40 and 52 channels.<sup>486</sup> Capacity continues to increase as operators integrate fiber optic cable into their systems.

177. LECs, like cable systems, use spectrum enclosed in wires for the distribution

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<sup>483</sup> Dr. Walter Ciciora, Cable Television Labs, Inc., *An Overview of Cable Television in the United States* 4 (1995). Bandwidth is one measure of capacity for communications networks and is measured in cycles per second, or "hertz," typically gigahertz (billions of cycles per second, "GHz"), megahertz (millions of cycles per second, "MHz"), or kilohertz (thousands of cycles per second, "kHz"). The bandwidth of different networks varies depending upon the transmission media employed. Harry Newton, *Newton's Technical Dictionary* 126 (1994).

<sup>484</sup> Price Waterhouse, *supra*, at 110.

<sup>485</sup> Most cable systems are operating at capacities from 400 MHz to 550 MHz, with a single system operating at 1 GHz, and several operating at 750 MHz capacity. *Id.*

<sup>486</sup> Ciciora, *supra*, at 22.

portion of their networks. The difference is that the majority of LEC local loop plant (the portion of the network between the local central office telephone switch and the customer) currently consists of twisted copper wire pairs, designed for the transmission of narrowband signals, but not as well suited for transmission of broadband signals.<sup>487</sup> Thus, despite the sophisticated switching capability and ubiquitous deployment of their networks, the local portion of the LEC plant is generally limited in terms of bandwidth when compared with that deployed by other MVPDs. These constraints are not likely to apply to video dialtone architectures, which are generally designed with broadband distribution plant.

178. Many current and potential competitors to cable operators use or plan to use wireless technologies to distribute video programming to subscribers. These competitors include systems using MMDS, LMDS, and DBS distribution technologies. The principal advantage of these wireless technologies is that they can be deployed without the installation and maintenance of a wireline system.<sup>488</sup> A potential disadvantage is that they have been allocated only a comparatively small amount of spectrum.

179. In anticipation of emerging competition in markets for the delivery of video services, many MVPDs are apparently planning enhance their standard services and expand their offerings to include new services such as Internet access, video on demand, and other interactive services.<sup>489</sup> Such efforts require increased bandwidth and two-way network capabilities. Two of the primary strategies MVPDs are employing to increase bandwidth are upgrading system architecture and deploying digital compression.<sup>490</sup> Cable operators and LECs are pursuing both strategies while MVPDs using wireless distribution methods are focusing primarily on digital compression.

## **2. Upgrading Wired Architectures**

180. A major limitation on cable system capacity is the inability of coaxial cable to carry signals over long distances without the use of amplifiers. On the other hand, fiber optic cable can transmit signals over much longer distances without the use of amplifiers. Fiber optic cable can be deployed in the trunk and distribution portions of cable networks, or extended all the way to the node (the point at which a cluster of individual households connect to the network). From the node, information is transmitted to subscribers' houses over coaxial cable. This combination of fiber optic cable and coaxial cable is referred to as a

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<sup>487</sup> Price Waterhouse, *supra*, at 113; Gerard Klauer & Co., *Wireless Cable Primer*, April 20, 1995, at 16.

<sup>488</sup> Bilotti, Nabi & Takada, *supra*, at 75.

<sup>489</sup> Dwight L. Allen, Jr., H. William Ebeling, Jr. & Lawrence W. Scott, Deloitte & Touche, *Speeding Toward the Interactive Multimedia Age* 1, 14-17 (1994).

<sup>490</sup> Gail Bronson, *Bandwidth: 1995's Hot Buzzword*, *Interactive Age*, Jan. 30, 1995, at 40.

hybrid fiber-coax ("HFC") architecture.<sup>491</sup>

181. During the past three years, the cable industry's deployment of fiber optic cable has grown by over 100% annually.<sup>492</sup> Current estimates indicate that over 33% of all cable subscribers are served by cable systems employing an HFC architecture,<sup>493</sup> and some estimate that the number of subscribers served in this manner will increase dramatically over the next five years.<sup>494</sup>

182. LECs are also integrating fiber optic cable into their networks. During 1994, LECs upgraded over 21,000 route miles of their networks to fiber optic cable.<sup>495</sup> Nonetheless, only 6% of LECs' networks, which total nearly 3.7 million route miles of cable, consist of fiber optic cable.<sup>496</sup> Furthermore, roughly 60% of this fiber is contained in the interoffice portion of the network (the part of the network that connects local telephone office switches to one another).<sup>497</sup> Thus, the local loops, which comprise 89% of the LECs' networks, are almost entirely comprised of low capacity twisted copper wire pairs.<sup>498</sup> LECs are considering two principal architectures to replace their current architectures dominated by copper wires -- switched digital video ("SDV") and HFC.

183. In its most advanced form, the SDV architecture requires the deployment of fiber optic cable to an optical network unit ("ONU") serving a small number of homes.<sup>499</sup> The remainder of the distance from the ONU to a subscriber's home would be traversed by a combination of twisted copper wire pairs and coaxial cable. Using this architecture, LECs could provide switched telephony and compressed digital video services without replacing all

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<sup>491</sup> Ciciora, *supra*, at 48.

<sup>492</sup> Joan Finamore, Corning, Inc., Opto-Electronics Group, *Guidelines* 6 (Summer 1995).

<sup>493</sup> Price Waterhouse, *supra*, at 111-12.

<sup>494</sup> *Id.*

<sup>495</sup> Jonathan M. Kraushaar, Federal Communications Commission, *Fiber Deployment Update End of Year 1994* 21 (July 1995).

<sup>496</sup> Federal Communications Commission, *Statistics of Communications Common Carriers* 157 (1993/1994 ed.).

<sup>497</sup> Kraushaar, *supra* at 28-29.

<sup>498</sup> *Id.*

<sup>499</sup> Ismini Scouras, *New ICs Provide SDV Solution*, Electronic Buyers News, Oct. 9, 1995, at 16.

of the twisted copper wire pairs connecting homes to their networks.<sup>500</sup> The transmission of analog video signals, however, may still require a separate coaxial cable connecting subscribers' homes to the ONU.<sup>501</sup>

184. As described above, the HFC architecture, which connects homes to a shared node using coaxial cable, would allow LECs to deliver analog and digital video signals to subscriber homes both as a broadcast service (i.e., a basic package of channels delivered simultaneously to all homes) and as a "near video on demand" or "video on demand" service, where individual subscribers can receive specific programming.<sup>502</sup> Voice and data services could also be offered over the existing twisted copper wire pair or potentially over the coaxial cable.<sup>503</sup>

185. Proponents of SDV architecture stress its higher capacity, its efficient handling of both voice and video digital signals, the low maintenance costs associated with fiber, and the efficiency of using existing twisted copper wire pairs to connect homes to the network.<sup>504</sup> Advocates of HFC architecture, on the other hand, emphasize the cost of the HFC solution relative to that of installing fiber-to-the-curb in an SDV architecture. Currently, the cost of deploying SDV is estimated to be about \$400 higher per household than HFC,<sup>505</sup> although AT&T Microelectronics reportedly has introduced low-priced SDV chip sets.<sup>506</sup>

### 3. *Digital Compression*

186. Digital compression is the process by which analog signals are digitized (converted to streams of "1"s and "0"s) and then compressed, using an encoding process that extracts only the information necessary for the decompression of the signal at its destination. By transporting only essential information, the amount of bandwidth the signal occupies is

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<sup>500</sup> Richard Karpinski, *Up Close: U S West's New Video Strategy*, Interactive Age, Nov. 14, 1994, at 53.

<sup>501</sup> *Id.* New technologies allow twisted copper wire pairs to carry much increased bandwidth over a short distance, and thus replacement of the twisted pairs may not be required all the way to the home.

<sup>502</sup> Price Waterhouse, *supra*, at 110-11.

<sup>503</sup> *Id.*

<sup>504</sup> AT&T Microelectronics, Inc., *New Chip Platform for Interactive Services Over Copper Wire* (News Release), Oct. 2, 1995.

<sup>505</sup> Nicholas Negroponte, *2020: The Fiber-Coax Legacy*, *Wired*, Oct. 1995, at 220.

<sup>506</sup> Leslie Ellis, *Set-Top Vendors Weigh New Switched Digital Chip Set*, *Multichannel News*, Oct. 9, 1995, at 65.

dramatically reduced. Various encoding techniques have been developed to implement this technology with resulting compression ratios as high as 10:1.<sup>507</sup>

187. Industry representatives are working to develop uniform standards for digital transmission, compression and possibly security. This effort is being undertaken by the Digital Audio Visual Council ("DAVIC"), Moving Pictures Expert Group ("MPEG"), and the Video and Electronics Standards Association ("VESA").<sup>508</sup> In a step toward interoperability, a standard developed by MPEG has emerged as the most likely industry standard for digital compression.<sup>509</sup> The group has developed several compression standards for different media applications. The standard for digital television is called MPEG-2, and consists of video, audio, and systems components for compressing television signals.<sup>510</sup> Numerous vendors are in the process of employing MPEG-2 in the development of digital encoders and decoders for use by MVPDs and subscribers.

188. DBS providers, including DIRECTV, USSB, and Primestar, are the first MVPDs to implement digital compression technology on a wide scale. Currently, DIRECTV and USSB are broadcasting programming using the MPEG-1+ encoding format for audio and video and, according to industry analysts, are in the process of upgrading the video component to MPEG-2.<sup>511</sup> The set-top boxes currently in subscribers' homes are reportedly compatible with the MPEG-2 format, and subscribers will not have to upgrade their equipment.<sup>512</sup> Primestar currently uses General Instrument's DigiCipher set-top boxes, which employ a compression scheme different from MPEG-2. Primestar has announced plans to

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<sup>507</sup> Cable Television Labs., Inc., *MPEG IPR Backgrounder*, Internet Address: [http://www.cablelabs.com/PR/IPR\\_Backgrounder.html](http://www.cablelabs.com/PR/IPR_Backgrounder.html) (1995).

<sup>508</sup> In addition, the cable and consumer electronics industries are developing a decoder interface standard to resolve issues relating to the incompatibility between cable systems that use scrambling and consumer electronics equipment (e.g., TVs, VCRs, PCs), which can render inoperable features such as picture-in-picture, time recordings, and the ability to view one channel while recording another. *Implementation of Section 17 of the 1992 Cable Act, (Compatibility Between Cable Sys. & Consumer Elec. Equip.)*, First Report & Order, 9 FCC Rcd 1981 (1994), *recon. pending*, ET Docket No. 93-7. In this context the Commission expressed an interest in examining compatibility issues "relating to digital video technologies and services" in the future. *Id.* at 2005 ¶ 144.

<sup>509</sup> HBO Comments at 228.

<sup>510</sup> *MPEG-2 FAQ*, Internet Address: <http://www.cres4.it/~luigi/MPEG/mpeg2.html>.

<sup>511</sup> Price Waterhouse, *supra*, at 173.

<sup>512</sup> Halhed Enterprises, Inc., *Video Compression for Broadcasting Including Direct Broadcast Satellite*, Internet Address: <http://www.hei.ca/hei/mpeg2.html>, at "A Period of Transition," (1995).

upgrade its set-top boxes sometime in 1996 to DigiCipher II, which includes an MPEG-2 decoding option.<sup>513</sup> Digital compression technology, such as MPEG and DigiCipher, allows packagers of DBS programming to deliver four to eight channels of video programming with compact disc quality sound using the same amount of bandwidth required to deliver a single channel of analog programming on satellite systems.<sup>514</sup> Similarly, as discussed above, MMDS operators are considering digital compression technology to increase the capacity of their systems.<sup>515</sup>

189. According to industry sources, cable operators plan to introduce digital services into their major markets in 1996 or 1997.<sup>516</sup> It has been reported that plans to deploy digital technology earlier had been delayed in part by the industry's indecision over an encoding standard.<sup>517</sup> The video portion of this standard appears to have been found in MPEG-2.<sup>518</sup> However, there is some question whether issues relating to the implementation of this standard<sup>519</sup> may further delay the deployment of digital services by cable operators.

190. The cost of digital set-top boxes is another significant factor delaying the implementation of digital technology. As with other new products based on semiconductors, the initial cost of digital set-top boxes has been relatively high. Even at high volumes of production, current prototypes of digital set-top boxes to be deployed by cable systems are estimated to cost over \$500.<sup>520</sup> According to industry sources, however, MSOs are seeking set-top box prices in the \$300 to \$400 price range.<sup>521</sup> The cost of encoding equipment is also an issue. Such equipment must be installed at the headend so that incoming analog programming can be digitized before it is transmitted to the subscriber. Although, the price of MPEG-1 encoders has dropped significantly over time, a state of the art MPEG-2 encoder

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<sup>513</sup> Richard Doherty, *Look to the Skies*, OEM Magazine, June 1, 1995, at 46.

<sup>514</sup> Bilotti, Nabi & Takada, *supra*, at 75.

<sup>515</sup> *Supra* sec. II.C.

<sup>516</sup> Bilotti, Nabi & Takada, *supra*, at 9.

<sup>517</sup> Mark Berniker, *Set-Top Chaos: Delays Persist, Standards Remain Elusive*, *Broadcasting & Cable*, Sept. 25, 1995, at 58.; Carl Weinschenk, *Sizing Up the Future: AT&T, Siemens and Other Giants are Primed for Battle*, *Cable World*, Dec. 19, 1994, at 22.

<sup>518</sup> HBO Comments at 228.

<sup>519</sup> *MPEG-2 FAQ*, *supra*, at 3.

<sup>520</sup> GIC Comments at 14, n.22.

<sup>521</sup> Paul Kagan & Assocs., Inc., *Marketing New Media*, Feb. 20, 1995, at 1.

is currently priced at about \$100,000 per channel of video.<sup>522</sup> Even as these prices decline over time, systems serving small suburban and rural markets may be unable to afford such equipment and, consequently, unable to take advantage of digital technology to expand their capacity.<sup>523</sup> TCI's proposed distribution of Primestar's programming to cable operators and other MVPDs, which it calls "Headend in the Sky" service, may provide such systems with access to digital programming, although the extent to which programmers will make their services available is unclear.<sup>524</sup>

191. *LEC Plans for Using Digital Compression in ADSL Networks.* Given the preponderance of narrowband copper wiring in the local loops of LECs' networks, digital compression that uses that plant is being explored. The particular implementation of compression technology that has been under consideration by LECs is called Asymmetric Digital Subscriber Line ("ADSL"). Using ADSL, LECs will be able to offer services such as VHS-quality interactive television and video conferencing over their existing copper network.<sup>525</sup> Some consider ADSL to be an interim strategy to give LECs a foothold in the video distribution market while they upgrade their networks to SDV or HFC architectures.<sup>526</sup> On the other hand, ADSL technology also may be used as an adjunct to other distribution technologies.<sup>527</sup>

192. Currently, deployment of ADSL technology costs \$2,000 to \$3,000 per line, although some vendors are promising to decrease the cost to under \$600 by the end of 1996.<sup>528</sup> Another limitation of ADSL is the limited distance over which high speed transmissions can be maintained on the copper portion of the network. Currently, ADSL services can transmit data over a single copper pair to subscriber's home at a rate of 6 megabits per second ("mbps") with a 640 kilobits per second ("kbps") return path over a

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<sup>522</sup> Price Waterhouse, *supra*, at 169.

<sup>523</sup> *FCC Holds up Headend in The Sky License*, Independent Cable News, June 1995, at 11.

<sup>524</sup> See *supra* sec. II.B. See also Karen JP Howes, *TCI's Digital Satellite Headend*, Via Satellite, Sept. 1995, at 58, 62.

<sup>525</sup> Price Waterhouse, *supra*, at 113.

<sup>526</sup> Terry Sweeney, *ADSL Enhanced in Bid for Local Loop*, Comm. Wk. Int'l, Mar. 20, 1995, at 6.

<sup>527</sup> *Infra* para. 193.

<sup>528</sup> *Id.*

distance of about 9,000 feet.<sup>529</sup> On average, the distance between homes and LEC central offices is about 13,517 feet.<sup>530</sup> Thus, the implementation of ADSL would require LECs to install fiber optic cable in local loops, but not as much as would be required by a fiber to the curb SDV architecture. Industry vendors are addressing both of these limitations.<sup>531</sup>

193. According to industry sources, after expressing an initial interest in ADSL technology, many LECs shifted the focus of their upgrade strategies to fiber and HFC architecture.<sup>532</sup> Recent advances in ADSL technology have at least partially reversed this trend.<sup>533</sup> NYNEX and Bell Atlantic are reported to be interested in using ADSL technology in concert with their recent investment in MMDS.<sup>534</sup> MMDS would be used to provide one-way broadcasts of multiple cable channels, while ADSL would be employed to provide interactive services such as video on demand and Internet access. U S West is also reported to be considering the deployment of ADSL technology in its networks.<sup>535</sup>

#### **IV. STATUS OF COMPETITION IN MARKETS FOR THE DELIVERY OF VIDEO PROGRAMMING**

##### **Extent of Competition and Assessment of Market Performance**

###### **1. Overview**

194. The Commission finds in this *1995 Report* that cable television systems remain the primary distributors of video programming. Although competitive pressures from alternative video distributors are increasing, the Commission concludes that markets for the distribution of video programming are not yet competitive. Most video distribution markets continue to be highly concentrated, and incumbent cable operators face direct competition from overbuilders in only a few markets. During the past year, DBS systems have entered

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<sup>529</sup> Carol Wilson, *Telephone Companies Re-Evaluating Two-Way Technology on Copper Lines*, Inter@ctive Wk., at Internet Address: <http://www.zdnet.com/~intweek/print/news/950727a.html> (July 27, 1995).

<sup>530</sup> Kraushaar, *supra*, at 29.

<sup>531</sup> See, e.g., AT&T Paradyne, Inc., *AT&T Paradyne Unveils Modern Modem Technology* (Press Release), Sept. 21, 1995.

<sup>532</sup> Loring Wirbel, *Digital Standards Promise Expansion*, EE Times Interactive, Oct. 2, 1995, at 43.

<sup>533</sup> *Id.*

<sup>534</sup> Wilson, *supra*.

<sup>535</sup> Wirbel, *supra*, at 43.



most markets, making service become available to consumers throughout the continental United States, and achieving rapid increases in subscribership. Wireless cable systems have also increased subscribership at a rapid rate. However, the number of subscribers to alternative video distributors remains extremely low relative to the number of subscribers to cable systems.

195. The Commission's experience with the "effective competition" provisions of the 1992 Cable Act offers some evidence of the limited extent of competition in the video programming distribution market. Under the 1992 Cable Act,<sup>536</sup> a cable system is subject to effective competition if it meets any one of the following three tests:

- (1) fewer than 30% of the households in the cable system's franchise area subscribe to its service (the "low penetration" test);
- (2) the franchise area is (a) served by at least two unaffiliated MVPDs, each offering comparable video programming to at least 50% of the households in the franchise area, and (b) the number of households subscribing to programming services offered by MVPDs other than the largest MVPD exceeds 15% of the households in the franchise area (the "competing provider" test); or
- (3) an MVPD operated by the franchising authority for the franchise area offers video programming to at least 50% of the households in the franchise area (the "franchise authority provider" test).

196. Information about cable systems subject to effective competition comes primarily from two sources: (1) the Commission's survey of cable systems to establish the benchmark rate regulation scheme under the 1992 Cable Act and (2) orders of the Cable Services Bureau in cases to determine whether to certify a local franchise authority to regulate basic service rates. Of the 496 cable systems surveyed, 244 systems met one of the three tests for effective competition, but only 45 (less than 10% of the systems surveyed) satisfied the competing provider test.<sup>537</sup> Of the 137 effective competition cases the Bureau has resolved, 130 involved the low penetration test, and the Bureau determined that effective competition existed in 77 of these cases. In the 12 cases involving the competing provider test, the Bureau determined that the system faced effective competition in 4 cases, of which, 3 involved a competing cable system and 1 involved a wireless cable system. The Commission believes that these four cases provide the most convincing evidence of competitive forces at work, because at least 15% of the consumers in these franchise areas actually chose service

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<sup>536</sup> 47 U.S.C. § 543(d)(1).

<sup>537</sup> See *Implementation of Sections of the 1992 Cable Act (Rate Regulation)*, Second Order on Reconsideration, Fourth Report & Order, and Fifth Notice of Proposed Rulemaking, MM Docket No. 92-266, 9 FCC Rcd 4119, 4281-82 (1994).

from a provider other than the largest MVPD.<sup>538</sup> The fact that consumers made this choice in only 4 of 137 cases -- together with the small percentage of systems surveyed that met the competing provider test -- suggests that effective competition, as defined by the 1992 Cable Act, remains limited in markets for the distribution of video programming.<sup>539</sup>

197. In a recent order, the Commission proposes to waive, on a temporary and trial basis, certain rules regulating rates charged for cable programming services in Dover Township, New Jersey, upon the initiation there of the first permanent commercial VDT service by Bell Atlantic.<sup>540</sup> The proposed waiver would be effective for a two-year trial period beginning when Bell Atlantic initiates service within the incumbent cable operators' franchise areas.<sup>541</sup> The Commission believes that, although the statutory definition of effective competition will not yet be met, the beginning of VDT service will ensure that the incumbent cable operators' rates for cable programming services will not be unreasonable. The Commission also believes that the waiver may reduce regulatory burdens on the cable operators.

## 2. *Market Performance Indicators*

198. In the *1994 Report* the Commission assessed the extent to which the existing level of competition favorably influenced market performance -- i.e., how well a given market satisfies consumer demand in the least costly manner -- using several standard market performance indicators. Specifically, the Commission emphasized three indicators of market power, where little or no observed market power is consistent with good market performance: (1) the *q ratio*, a ratio of the market value of cable assets to the replacement cost of such assets; (2) pricing analysis showing that cable prices were lower in markets with cable system competitors; and (3) the *Lerner Index* of market power, the percentage difference between price and the marginal cost of production at the profit maximizing level of output. Each of these market performance indicators suggested that cable operators possessed and exerted market power in video programming distribution markets in 1994.

199. We see no need in this *1995 Report* to replicate or update the formal empirical analysis of market performance indicators provided in the *1994 Report*. First, given the concentrated structure of most video programming distribution markets and the persistence of

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<sup>538</sup> No cases have been filed under the franchise authority provider test.

<sup>539</sup> We note, however, that this analysis does not take into account "effective competition" systems that franchising authorities have not sought to regulate.

<sup>540</sup> See *Waiver of the Commission's Rules Regulating Rates for Cable Services (As Applied to Cable Sys. in Dover Twtnshp., N.J.)*, Order Requesting Comments, CUID No. NJ0213, \_\_ FCC Rcd \_\_\_, FCC 95-455 (Nov. 6, 1995).

<sup>541</sup> Records indicate that at least two cable operators offer cable service within Dover Township. *Id.* ¶ 8.

impediments to entry and competition,<sup>542</sup> it is unlikely that the entry and growth of new firms over the past year is extensive enough to change market conduct and, hence, market performance appreciably since last year. By contrast, the *1994 Report* updated the empirical market performance indicators last reported in the *1990 Cable Report*, a time period of sufficient length that some change in market structure and performance might be reasonably expected. Even then, the *1994 Report* still found that the *q ratios* ". . . suggest the presence of substantial market power,"<sup>543</sup> although one *q ratio* estimate was consistent with some reduction in market power in the cable industry.<sup>544</sup>

200. Second, the data employed by the Commission in the *1994 Report* to derive the market performance indicators preceded for the most part the imposition of price regulation on the cable industry. Given that the conceptual basis of all three of the market performance indicators relies on the assumption that firms are unconstrained in their attempt to maximize profit, the exact meaning of these indicators is unclear in the presence of cable rate regulation. Thus, it may be misleading to compute empirical market performance indicators that could be uncritically compared with earlier estimates that do not reflect the effects of cable rate regulation.

201. Although formal empirical indicators of market performance are, therefore, not provided in this *1995 Report*, it is possible to describe measures of market performance that reflect changes in the economic welfare of cable subscribers since the *1994 Report*. Recent data suggest that consumer welfare may be improving in some ways, although not as fast or as much compared to what might be realized if incumbent cable systems faced the ongoing and persistent pressure of fully-developed competition. For example, since the *1994 Report*, video distributors have continued to expand their capacity to deliver programming to consumers. The cable industry has expanded in terms of the number of homes passed, the number of subscribers, and the number of systems.

202. Distributors using alternative technologies have also expanded their capacity to supply delivered video programming to consumers, as evidenced by the growth in the number of subscribers to DBS, HSD, MMDS, and SMATV services reported above. Continued expansion by such alternative distributors is likely. In addition, LECs plan to enter markets and offer service to millions of households using several distribution methods (MMDS, VDT, and cable).

203. The range of programming choices offered to consumers has expanded, and continued expansion is likely. Since the *1994 Report*, cable operators have increased the number of cable networks that they offer, while vertical integration has decreased slightly. Alternative distributors have also increased the number of choices available to consumers.

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<sup>542</sup> *Infra* sec. 3.

<sup>543</sup> *1994 Report*, 9 FCC Rcd at 7545-6 n.541.

<sup>544</sup> *Id.* at 7545 ¶ 212, tbl. 5.2.

Furthermore, several LECs have entered into ventures relating to the supply and packaging of video programming.

204. *Conclusion.* Growth in cable network capacity, the number of cable programmers, and the range of consumer choice resulting from new entrants, such as DBS operators, generally have improved the economic welfare of consumers of multichannel video programming. However, the lack of intense competition in most video distribution markets means that further improvements in consumer welfare remain unrealized. While the Commission's cable rate regulation has attenuated the exercise of market power to some degree and provided some improvement in market performance and consumer welfare, further dramatic improvements in market performance will depend on the eventual emergence of intense competitive rivalry between and among multiple suppliers in local video programming distribution markets. Thus, market performance in local markets today remains only mixed, reflecting economic growth that has benefitted consumers, but not reflecting the level of market performance that more intense competitive rivalry may be expected to produce. A particular concern, moreover, is that impediments to entry and competition may delay or prevent future improvements in performance.

### 3. *Existing and Potential Impediments to Entry and Competition*

205. There may be existing and potential impediments that deter entry and prevent increased competition in video programming delivery markets. Some impediments result from the strategic behavior of incumbent firms, and others from legal and regulatory restrictions. These impediments may block potential entrants from entering the market, or increase the entrant's cost, or decrease the attractiveness of the entrant's service, compared with that of the incumbent firms.

#### *a. Cable System Behavior to Deter Entry and Eliminate Competition*

206. Much of the cost of constructing a cable distribution network is a sunk cost, i.e., an operator's cable system probably cannot be put to another equally profitable use if video distribution became unprofitable.<sup>545</sup> The existence of sunk costs creates strong incentives for incumbent cable operators to engage in strategic behavior designed to protect their investments. Alternative distributors must also incur sunk costs to enter the video distribution market and compete with incumbent cable operators. As we discuss below, strategic behavior by cable operators to disadvantage their rivals can create a credible threat that entry will be unprofitable. In that case, because the costs of entering video distribution are sunk, entrants will be unable to shift their systems to some other profitable use. Thus, entrants' need to incur sunk costs may enable incumbent cable operators to deter entry by engaging in strategic behavior.

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<sup>545</sup> A discussion of sunk costs and related economic concepts is presented in *1994 Report*, 9 FCC Rcd at 7604 App. H.

207. An incumbent may attempt to disadvantage its rivals by raising their costs or decreasing their access to a needed production input.<sup>546</sup> For example, cable operators may attempt to decrease access to programming by competing video distributors. The Commission's enforcement of the program access provisions of the 1992 Cable Act appears to be ensuring competing video distributors' access to satellite programming from vertically integrated programming services.

208. An incumbent may also attempt to disadvantage its rivals by strategic non-uniform pricing. In this regard, the Commission has observed that cable systems often offer bulk discounts to subscribers in MDUs, and has expressed a desire that bulk discounts not be used as a means of displacing competition from alternative MVPDs, such as SMATV operators.<sup>547</sup> The Commission's desire is thus consistent with the underlying purpose of Section 623(d) of the Communications Act.<sup>548</sup> Accordingly, the Commission's regulations require that all similarly sized MDUs in a franchise area receive "the same bulk discount rate structure," and that the cable operator be able to demonstrate that it receives some economic benefit from offering the discount.<sup>549</sup>

209. In response to the *NOI*, commenters complain that cable operators are offering potential MDU customers discounted and non-uniform rates that are not available to other MDU customers, and are thereby violating the uniform rate structure of the 1992 Cable Act.<sup>550</sup> The Commission believes that its current uniform rate rule strikes an appropriate balance between limiting the potential for anticompetitive strategic conduct, and avoiding micromanagement of cable operator marketing decisions. To the extent a competing distributor believes that it has been the target of prohibited non-uniform rates, it may file a uniform rate complaint under the Commission's rules.<sup>551</sup> We recognize, however, that the

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<sup>546</sup> See Tom Krattenmaker & Steve Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price*, 96 Yale L. J. 209, 223-224 (1986).

<sup>547</sup> 1993 Rate Report & Order, 8 FCC Rcd 5898 ¶ 424.

<sup>548</sup> 47 U.S.C. § 543(a). Section 623(d), which generally requires that a cable operator have a uniform rate structure throughout its franchise area, embodies Congress's concern that a cable operator could injure competition by temporarily offering discounts in part of its franchise area to undercut a competitor. S. Rep. No. 102-92, 102d Cong. 1st Sess. 76 (1991).

<sup>549</sup> *Id.* See also *Implementation of the 1992 Cable Act (Rate Regulation & Buy-Through Prohibition)*, Third Order on Reconsideration, MM Docket No. 92-262, 9 FCC Rcd 4316 (1994).

<sup>550</sup> Heartland Comments at 1-3; Liberty Cable Comments at 9-10; OpTel Comments at 4-5; WCAI Comments at 19-22.

<sup>551</sup> Indeed, there are three cases pending before the Commission in which overbuilders  
(continued...)

decision of the United States Court of Appeals for the District of Columbia Circuit in *Time Warner* has narrowed the protection of the uniform rate provision to markets where the cable operator is not subject to effective competition.<sup>552</sup>

*b. Legal, Regulatory and Other Potential Impediments*

210. In the past year, the Commission and courts eliminated or reduced several impediments to entry identified in the *1994 Report*. Two federal circuit court decisions have overturned the cable-telco cross-ownership ban, and the Commission staff clarified that it would not enforce this ban against LECs subject to the court decision. The Commission streamlined its rules on LEC entry through overbuilding. In addition, the Commission recently granted several Section 214 applications to Ameritech to build cable systems. The Commission recently decided to permit cable operators to acquire SMATV systems within their service areas. In the past year, the Commission also has taken actions to promote entry and more rapid expansion of wireless cable, including the adoption of measures to process new applications for MDS spectrum and expanding the protected service area of MDS stations.

211. Despite these actions by the Commission and courts, however, several impediments to entry and competition may remain. For example, a number of actual and potential competitors to incumbent cable operators contend that cable operator conduct under the Commission's home wiring rules has a chilling effect on competition. The Commission's home wiring rules require, *inter alia*, that cable operators provide subscribers with the opportunity to acquire cable home wiring within thirty days after termination of service before the cable operator removes the wiring from the premises.<sup>553</sup> Actual and potential competitors

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<sup>551</sup>(...continued)  
allege violations of the uniform rate provision and one case pending in which a wireless cable operator alleges violations of the uniform rate provision. *American Cable Co. v. TeleCable, Inc.*, CSR-4198, CSR-4206, *Cross Country Cable, Inc. v. C-Tec Cable Systems of Michigan, Inc.*, CSR-4414-P, CSR-4449, *Beach Cable v. Jones Intercable Inc.*, CSR-4500-R, *People's Choice TV Corp. v. Jones Intercable Inc.*, CSR-4578.

<sup>552</sup> See *Time Warner Entertainment Co., L.P. v. FCC*, No. 93-1723 (D.C. Cir. 1995). Some commenters are concerned because this decision narrows the scope of the uniform rate provision. See, e.g., WCAI Comments at 19-22.

<sup>553</sup> 47 C.F.R. § 76.802. The purpose of the cable home wiring rules is to avoid the disruption from having the wire removed after service is terminated and to allow subscribers to utilize the wires with competing MVPDs, thereby facilitating competition from these entities. *Implementation of the 1992 Cable Act, Cable Home Wiring*, Report & Order, 8 FCC Rcd 1435 (1993), *recon. pending*, MM Docket No. 92-260. The Commission currently has before it a petition to initiate a rulemaking to determine whether and how cable subscribers may have access to existing cable home wiring for the delivery of competing and

(continued...)

to incumbent cable operators argue that the Commission's definition of home wiring for MDUs does not permit potential competitors to connect subscribers to their systems without damaging the subscriber's premises, since the wiring in many MDUs is embedded in the walls. Several commenters state that this is a significant disincentive for subscribers to switch providers.<sup>554</sup> Cable operators argue, however, that the Commission's home wiring rules merely permit a cable operator to remove its own property from MDUs, or to terminate its own lines.<sup>555</sup> These issues are the subject of pending petitions for reconsideration.

212. Commenters also identify local franchise regulation as an impediment to entry by overbuilding. In the *1994 Report*, the Commission discussed Section 621(a) of the Communications Act, which prohibits the unreasonable denial of a competitive franchise. We continue to support clarification of Section 621(a) to make clear that it applies to all exclusive franchises regardless of when they were adopted.

213. Some local laws and regulations may also impede entry. For example, despite limited preemption by the Commission, local zoning regulations may inhibit competition from direct-to-home programming distributors by preventing home users from installing receiving dishes. As noted above, the Commission has an ongoing rulemaking proceeding to modify its zoning preemption rules.<sup>556</sup>

214. While legal and regulatory obstacles may delay the spread of competition, the speed of deployment of new competitive technologies also is affected by the business decisions of potential entrants. Decisions regarding the choice of technologies, investment strategies and assessment of risk strongly influence the speed at which competition emerges. Finally, there remains a possibility that new potential entrants may be evaluating the costs and political climates of building an entirely new infrastructure or trying to acquire existing systems.

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<sup>553</sup>(...continued)

complementary services. See *Joint Petition for Rulemaking on Cable Television Wiring*, Public Notice, RM No. 8380, 8 FCC Rcd 8184 (1993).

<sup>554</sup> Liberty Cable Comments at 17-18; Bell Atlantic Comments at 11; OpTel Comments at 5-6; WCAI Comments at 23; Liberty Cable Reply Comments at 7-8.

<sup>555</sup> Time Warner Reply Comments at 25-29; Cablevision Reply Comments at 7-9.

<sup>556</sup> *Supra* sec. II.B.

**4. Outlook for Competition in Video  
Programming Distribution Markets**

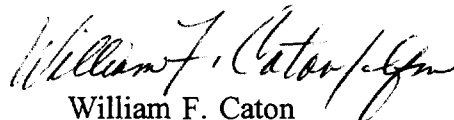
215. In most local markets, a single cable system remains the primary distributor of multichannel video programming services. Despite the growth of DBS and wireless cable subscribership in the past year, competitive rivalry in most local video programming distribution markets is insufficient to constrain the market power of incumbent cable systems. The continued growth of DBS and the entry of additional competitors may exert a significant, favorable long-run effect on market conduct and performance in video programming distribution. In addition, LECs are planning to enter video distribution markets by several means, including VDT, wireless cable and stand alone cable systems. In sum, the market for the distribution of video programming is not yet competitive, although we are cautiously optimistic about the outlook for increased competition. Nevertheless, we believe that it will take some time for entry to have a significant effect on the market power of cable operators.

**V. ADMINISTRATIVE MATTERS**

216. This *Report* is issued pursuant to authority contained in Sections 4(i), 4(j), 403 and 628(g) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), 154(j), 403 and 548(g).

217. It is ORDERED that the Secretary shall send copies of this *1995 Report* to the appropriate committees and subcommittees of the United States House of Representatives and the United States Senate.

FEDERAL COMMUNICATIONS COMMISSION

  
William F. Caton  
Acting Secretary



## **APPENDIX A**

### **List of Commenters**

#### **Comments**

1. Bell Atlantic
2. BellSouth Telecommunications, Inc.
3. CAI Wireless Systems, Inc.
4. CNBC, America's Talking and Canal de Noticias
5. DIRECTV, Inc.
6. ESPN, Inc.
7. General Instrument Corporation
8. Group W Satellite Communications
9. GTE Service Corporation
10. Heartland Wireless Communications, Inc.
11. Home Box Office
12. James Cable Partners, L.P.
13. Liberty Cable Company, Inc
14. Lifetime Television
15. METS Fans United/Virginia Consumers for Cable Choice and Fairfax County  
Citizens For Cable Competition
16. Motion Picture Association of America, Inc.
17. National Cable Television Association, Inc.
18. National Cable Television Cooperative, Inc.
19. National Rural Telecommunications Cooperative
20. National Telephone Cooperative Association
21. NYNEX Telephone Companies
22. OpTel, Inc.
23. Pay-Per-View Network, Inc. d/b/a Viewer's Choice
24. Primestar Partners L.P.
25. PrimeTime24
26. Satellite Broadcasting and Communications Association of America
27. Satellite Receivers, Ltd.
28. SBC Communications, Inc.
29. Time Warner Cable
30. Vermont Wireless Cooperative
31. Viacom Inc.
32. Video Dialtone Association
33. Wireless Cable Association International, Inc.